

--ABSTRACT OF THE DISCLOSURE

A multimode-based phase modulating apparatus capable of reducing the degradation of modulation precision and suppressing the unnecessary power consumption. This apparatus has a switch for switching the modulation modes of a PLL circuit between a single-point modulation and a double-point modulation. In a case of a narrow modulation bandwidth, the switch is turned off to cease a second digital baseband signal, thereby causing the PLL circuit to perform the single-point modulation in which only a first digital baseband signal from a frequency division rate generating part is used for the modulation. Contrarily, in a case of a wide modulation bandwidth, the switch is turned on, thereby performing the double-point modulation using both the first digital baseband signal and the second digital baseband signal.--